INTRA-UTERINE DEVICES: INCREASING OPTIONS FOR LONG-TERM CONTRACEPTION

A GUIDE FOR LOCAL GOVERNMENT UNITS

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Background

The Philippine Government addresses the causes and consequences of population growth primarily through the work of two national government agencies, the Department of Health (DOH) and the Commission on Population (POPCOM). The DOH is mandated to implement the National Family Planning Program within the Reproductive Health Framework. It also provides technical and financial assistance to Local Government Units (LGUs) and ensures that sufficient contraceptives are available and distributed in all local public health facilities.

Decentralization, which formally took effect in 1992, propelled the devolution of numerous functions of the national government and placed LGUs at the forefront of providing their constituencies with social services that include health and family planning. It also tasked LGUs with the formulation of comprehensive development plans, the implementation of multi-sectoral development programs and the promotion of community-based population programs and services. Hence, in 1999, the DOH launched the Matching Grant Program (MGP) to provide financial and technical assistance to municipalities and cities to improve their service delivery, particularly in the areas of family planning, maternal and child health, and nutrition.

The 1998 NDHS and the 2001 Family Planning Survey showed that the contraceptive prevalence rate in the Philippines are 39% and 49%, respectively. Unmet need for family planning is estimated at about 20% of the women of reproductive age. This means that a large number of women who do not want any more children are not using any form of contraception.

Many of the LGUs participating in the MGP are interested in establishing specific services, particularly no-scalpel vasectomy, IUD, and a new natural family planning method, the standard days method (SDM) but they do not know how to go about it. Concerns were also raised on the cost implications of establishing such services. However, the experience of Bago City in Negros Occidental in promoting and providing NSV showed that it could be done. Other MGP areas like Naga City and Donsol, Sorsogon in the Bicol Region, and Kapalong in Davao Norte are also NSV success stories. Promoting IUD services in Pantukan, Compostela Valley and SDM in Lupon and Banaybanay can also be models for setting up these FP services.

This module documents the process in setting up IUD services based on the experiences of LGUs that have successfully set them up. It also compiles existing local materials that may be used by other interested LGUs in orienting prospective clients and in setting up similar services.

The Copper T 380 A Intrauterine Device

The Copper T 380 A Intrauterine Device is made of a flexible T-shaped plastic frame with copper wire on the stem and copper sleeves on the arms. A trained provider inserts it inside the uterine cavity. Once inserted, the IUD provides protection from pregnancy for a period of 10 years.

A. Establishing the Need for IUD Services

Experience suggests, that the availability of a wide range of family planning methods increases the probability of acceptance and continued use.

IUD services are more difficult to provide compared to other types of reversible contraceptives such as pills and injectables, however, they can be introduced in FP programs using existing personnel, facilities, and referral and service delivery channels. Program managers have to take into consideration the special requirements for the provision of safe, high-quality IUD services that may require additional personnel or facilities.

Any decision to establish IUD services should be based on the need for this specific family planning service. The experiences in MGP areas like Pantukan, Compostela Valley showed that a community survey using the Community-Based Management Information System (CBMIS) can help identify potential demand and caseload for IUD services.

IUDs are particularly useful for women who:

- Have reached their desired family size but are not ready to accept sterilization
- Are planning a birth interval of more than 2 years
- Are at low risk of contracting a sexually-transmitted genital tract infection
- Are breastfeeding
- Have shown poor compliance with other temporary FP methods like pills, or in following rules of Natural Family Planning.

IUDs are particularly suitable for use by women who cannot use estrogen-containing contraceptives because of:

- ☞ High blood pressure
- ☞ Blood-clotting problems
- ☞ Heavy smoking for those over 35 years.

Program managers should also weigh the suitability of IUD to certain clients against the fact that provision of IUD services requires:

- ☞ Appropriately-trained health workers (doctors, nurses, midwives, and counselors)
- ☞ Appropriate facilities
- ☞ An infection prevention system designed to minimize the risk of transmission of diseases, including viral hepatitis B and AIDS to the clients, health workers, and support staff
- ☞ A well-organized follow-up/referral system.

B. Setting Up the Required Facilities

Physical Facilities

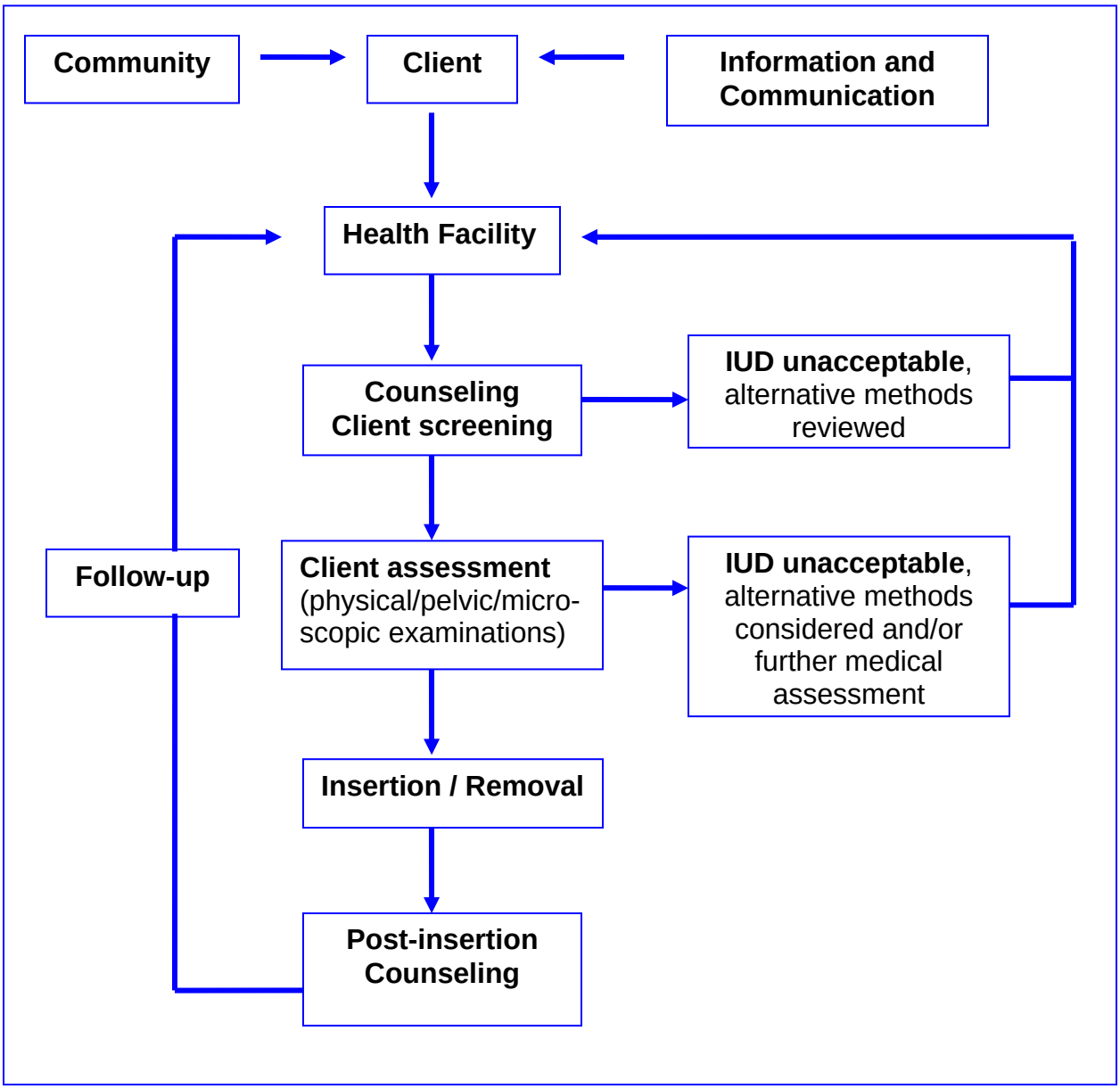
IUD services can be provided in a variety of different permanent and temporary locations. Most clinics that provide primary health care services will be able to incorporate IUD services within the existing facilities. However, certain requirements must be met if high-quality, comprehensive service is to be established and maintained. The following should be available:

- ☑ A comfortable waiting area for clients
- ☑ A room for counseling, preferably isolated or private
- ☑ A private examination room, with adequate natural or artificial lighting and a sink, where clients can undergo general and pelvic examinations and IUDs can be inserted or removed
- ☑ An area where vaginal and/or cervical specimens can be examined microscopically or processed prior to delivery to a laboratory for examination
- ☑ A sluice area (cleaning area, utility room, etc.) where instruments and reusable gloves can be cleaned and line washed
- ☑ Toilet and washing facilities for client and staff, with adequate water supply
- ☑ An area for high-level disinfecting or sterilizing instruments, and space for their storage

- ☑ A storage area for medical supplies, which should be cool, dry, secure, and well-ventilated
- ☑ An area for office work, completion and storage of records, and storage for information materials.

Client Flow

An orderly flow of clients through the health facility is necessary to ensure a comprehensive, cost-effective service and to enhance client satisfaction. Below is an illustration of a well-managed client flow.



Client Location and Working Hours

If a new facility is to be established, its location and working hours should be assessed in relation to potential client accessibility.

- ☑ Do majority of clients have easy access to the clinic?
- ☑ Are the clinic hours convenient for working clients?

If the service point is too far from where the client lives, they may not return for follow-up visits because of the distance and the possible expenses (fares, loss of income for time off, cost of child care).

Providing services after regular working hours or on weekends may increase client accessibility.

Equipment and Instruments

The insertion and removal of IUD do not require an operating room, but sterilization or high-level disinfection (HLD) of instruments, and clean conditions are absolutely essential. The equipment and instruments can be divided into the following categories:

- ☑ Instruments and equipment normally found in a comprehensive FP clinic
- ☑ Items specific to IUD (insertion/removal kit)
- ☑ Materials needed to prevent infections and minimize transmission of HIV and hepatitis B virus.

The quantities needed are based on the predicted demand for IUD insertion and removal in the particular clinic. Enough instruments must be available to enable insertions to continue while other instruments are being decontaminated, cleaned, disinfected or sterilized. Every clinic should have:

- ☑ An examining table with stirrup
- ☑ Instruments for carrying out gynecological examinations
- ☑ Good artificial or natural lighting.

In areas where STIs are prevalent, additional items recommended are:

- ☑ Microscope and materials or arrangement with other facilities should be made for examining vaginal and cervical smears.

The instruments and equipment needed for IUD insertion are the following:

- ☑ Bivalve vaginal speculum (small, medium, and large)
- ☑ Single-tooth tenaculum
- ☑ Uterine sound
- ☑ Sponge or ring forceps
- ☑ Scissors
- ☑ Bowl for antiseptic solution
- ☑ IUD inserter and IUD (usually comes in pre-sterilized package).

For Copper T 380 A IUD removal, the following instruments should be added:

- ☑ Straight forceps or alligator forceps (this requires adequate training and experience).

Other items required are:

- ☑ Gloves (sterile or high-level disinfected)
- ☑ Antiseptic solution for cleaning the cervix (preferably an iodophor such as povidone-iodine)
- ☑ Gauze or cotton balls
- ☑ A light source adequate for visualizing the cervix (a flashlight will do).

C. Selecting and Training the Personnel

The number and type of staff needed in a clinic offering IUD services will vary with the size of the clinic, caseload, other services provided, and service hours. Consideration should be given to the preferential employment of a female service provider because they are culturally more acceptable in certain circumstances, such as when intimate examinations or interviews or home visits are necessary.

Staffing Pattern

The factors that influence staffing pattern include:

- ☞ ***The type and mix of FP services to be offered.*** The more effective methods like IUDs and voluntary surgical contraception (VSC) tend to be more labor-intensive and time-consuming than other methods, and require staff with specialized skills (and thus requires more training) and a greater degree of supervision.

- ☞ ***The volume of services.*** In low-volume clinic-based services where less than five service providers are needed, it is generally possible for one

person to manage both the clinical and administrative aspects of family planning services.

In high-volume services, however, where five or more service providers are required, it is generally necessary to have a full time-manager.

- ***The mode of service provision***. Staffing pattern will depend on whether services are provided only at the base facility or offered in conjunction with outreach programs for which mobile facilities or temporary clinics are established.

- ***The allocation of responsibilities***. In clinics with small caseloads, a nurse, a midwife, or a physician with an assistant, can usually handle several functions and provide a complete package of services.

  In clinics with high caseloads, staff tends to become more specialized resulting in a more efficient client flow.

  However, in all types of facilities, functions should be delegated to the staff with the lowest level of training consistent with safe and quality clinical practice.

  For example, a midwife or nurse who had undergone CBT FP Level 1 training might well receive the client, take the preliminary medical history, and provide initial counseling. The nurse, midwife, or physician with Comprehensive or CBT FP Level 2 training can then review the history, perform the physical/pelvic examination, handle the necessary microscopy, insert or remove the IUD, and provide the client with instructions and exit counseling. The lower-level staff can also oversee or perform the instrument cleaning, disinfecting or sterilizing, and general cleaning task.

  As the caseload increases, more personnel, each responsible for a particular area or task, may be needed.

Staff Functions

Focusing on the tasks to be performed should make staffing plans more relevant. Tasks should be delegated to the staff with the appropriate training to provide medically-safe and quality services. Certain functions should be allocated to personnel on a regular basis and the clinic manager should designate the person responsible for carrying out a given function, taking into account the training and ability of each staff member. In most clinics, the same person may perform several functions.

The functions that should be assigned to a specific person or persons are as follows:

- Management of the clinic
- Supervision of the staff
- Cleaning of facility
- Ordering of IUDs and other supplies
- Logging-in and storing of IUDs and other supplies
- Bookkeeping for financial control
- Scheduling of appointments for clients
- Providing information materials to clients and ensuring that these materials are available at all times to clients and staff
- Counseling clients (at various times)
- Taking the medical histories of the clients
- Screening clients
- Performing general physical examination and recording observations
- Performing microscopic examination of vaginal and cervical smears
- Disinfecting or sterilizing instruments
- Preparing supplies needed for each IUD insertion or removal
- Inserting or removing IUDs
- Managing common side effects and complications, referring clients with serious complication
- Scheduling follow-up visits
- Undertaking outreach activities initiated by the clinic with the aim of recruiting new clients
- Following-up clients who do not return for appointments
- Assessing user satisfaction with IUD services
- Maintaining medical records
- Collecting and reporting data.

The role of the supervisor

The supervisors are responsible for ensuring that tasks (in which they themselves are skilled) are carried out by the staff for whom they are responsible, and that these are completed efficiently and effectively. They should understand that *the supervisor's function is one of supporting, guiding,*

and directing other clinic staff and not simply of giving orders or finding fault. Supervisors should develop the ability to work despite any apparent obstacles and, above all, should be role models for other staff members. They should be experts at problem-solving where resources (including trained staff) are in short supply and facilities, often poorly maintained.

The supervisor should be responsible for:

- Helping and supporting health workers in planning, implementing, and evaluating their work
- Providing technical advice
- Handling grievances and disciplinary problems involving health workers
- Stimulating and evaluating performance
- Serving as link between health workers and the central health authorities.

In a tertiary-level facility, the supervisor must have additional skills:

- Determine and periodically evaluate program/clinic objectives
- Write job descriptions and designate the qualifications and training necessary for each job
- Recruit staff and maintain their motivation
- Assess the training needs of the new staff
- Provide training
- Determine whether staff members adequately perform the jobs described
- Provide frequent feedback to staff and solicit their ideas on how to improve program performance
- Reward good performance
- Determine the reasons for poor performance:
  - Skills deficiency (training inadequate)
  - Motivation problems (insufficient pay, rewards, etc.)
  - Resource problems (inadequate supplies, etc.)
  - External problems (bad weather, etc.)

D. Informing Potential Clients

Creating Awareness

- ☑ **Clinic Signage** -Clients should be aware of the services available at the center, i.e., IUD services. If the service is available only on certain days or time of the day, this information should be prominently displayed in front of the facility (center). Service fees, if required, should be clearly stated.

- ☑ **Product Launching** – the MGP provides a variety of activities to launch IUD services in the communities, to wit:

  - o **Seminar/Lecture/Open Forum** on IUD. Testimonials from clients who have used IUD.

  - o **Community Theater/Comedy Skit** – on the values of planning the family and answers to questions frequently asked about IUD. How does it work? How is it used? What are the possible side effects?

  - o **Street Parade** – participated in by local government officials, barangay health workers, students, and interested parties from the community.

- ☑ **Streamers –** posted at strategic areas announcing the availability of the service.

- ☑ **Posters –** can also be displayed in prominent places in the clinic and other areas in the community.

E. Maintaining Quality of Care

The quality of care is usually defined in the context of client satisfaction, such as:

- ☑ Information given to the client
- ☑ Access-geographical, physical, and financial
- ☑ Waiting time and client flow
- ☑ Delivery of service based on service protocols
- ☑ Post-service or exit follow-up.

It can also be assessed based on the facilities available and infection prevention measures adopted.

Collaborating Agencies

The health facility needs to collaborate with other agencies to ensure the delivery of high-quality health services. The motivation of clients for IUD services can be done by other agencies. The clinic may also need higher-level centers for referral of cases with complications.

Financing

- ☑ Personnel who are responsible for organizing a new IUD service program in their area must determine the initial cost as well as the recurring expenditures depending on local conditions and particular program design. For example, budget requirements may be influenced by whether IUD will be sold to the clients or given for free. It will depend on the type of informational activity to be used (e.g. word of mouth, mass media, community field agents).

- ☑ Experience in MGP areas showed that IUD services may be initiated with existing personnel and facilities. Initial cost involved the purchase of antiseptic solution such as povidone iodine for cleaning the vaginal canal and the cervix, and Cidex for high-level disinfecting of instruments. The health facility may have to purchase an IUD insertion and removal kit which costs between Php 10,000.00 to Php 15,000.00 per set.

Annex 1

INTRAUTERINE DEVICES

What are intrauterine devices?

Intrauterine devices (IUDs) are small flexible devices made of metal and/or plastic or silastic inserted inside the uterine cavity to prevent pregnancy.

What are the types of IUDs?

- Non-medicated IUDs, e.g., Lippes loop
- Medicated IUDs, e.g., copper or hormone-bearing IUDs- Copper T380A, LNG20

However, only the Copper-T380A is available in the Philippines.

How does IUD work?

The IUD prevents pregnancy through a combination of actions:

- Prevents fertilization
- Inhibits sperm migration in the upper female genital tract
- Inhibits ovum transport and fertilization.

How effective is IUD?

It is 96-99% effective.

For whom is IUD appropriate?

IUD is more appropriate for women clients who are:

- Spacing pregnancies
- Breastfeeding
- Having problems with barrier methods or oral contraceptive use
- Not ready to accept voluntary surgical contraception (VSC) or injectables but want long-term protection
- Looking for a method which does not require daily action or which does not need to be used with every act of intercourse
- Having difficulties in obtaining contraceptives on a regular basis

- Encountering privacy problems, e.g., difficulty in storing contraceptive supplies privately.

What are the cases when IUD should not be used?

Absolute contraindications:

- Suspected pregnancy
- Cancer of the uterus, cervix, ovaries, or the pelvic organs
- Infection/pelvic inflammatory diseases (PIDs)
- Current sexually-transmitted diseases (STDs), e.g., gonorrhea
- Recurrent or chronic PID
- Acquired immune-depression due to drugs or other causes such as AIDS
- Recent septic abortion until infection is completely cleared
- Women at high risk of STDs, e.g., with multiple sexual partners
- Acute cervicitis.

Relative contraindications:

- Rheumatic heart or other infections affecting the valves and muscles of the heart
- History of ectopic pregnancy

- Moderate or severe anemia
- Very heavy menstrual flow/severe dysmenorrhea
- For copper-bearing IUDs, allergy to copper and metabolic disorders caused by copper
- Nulliparity (not having borne a child) especially with history of PID or ectopic pregnancy
- Undiagnosed abnormal genital tract bleeding
- Poorly-controlled Diabetes Mellitus (until condition is controlled)
- Congenital abnormalities or benign tumors of the uterus (fibroids) which may distort the uterine cavity in a manner incompatible with proper IUD placement
- History of rheumatic fever.

How is IUD used?

The IUD is placed inside the uterus once by a trained health worker, after a careful examination of the client and review of her medical / OB-GYNE and surgical history. The Copper T380 A IUD must be replaced every 10 years.

What are the advantages of IUDs?

- No systemic effects
- Easy to use; do not interfere with sexual intercourse
- Create no mess
- Can be safely used during lactation; do not affect the quality and production of milk
- Are less expensive than pills
- Can be used without the knowledge of other people
- Can easily be removed by a trained health worker.

What are the disadvantages of IUDs?

- May be expelled
- Have temporary side effects, e.g., abdominal cramps, increased menstrual flow
- Not 100% effective
- Must be inserted by a trained health worker.

What examinations do clients need to undergo before they can use IUD?

- Clients must undergo complete physical examination, especially abdominal and pelvic examinations.
- Examinations are done prior to the insertion of IUD to rule out any contraindication and to guide the trained health worker during the insertion.

When can the IUD be inserted?

- The IUD, especially the copper T 380A, may be inserted any time during the cycle provided there are no contraindications, but preferably during menstruation when the cervix is open.

When should follow-up visits be done?

- IUD clients are advised to return to the clinic for follow-up on the first month, sixth month, and twelfth month after IUD insertion and once a year thereafter.

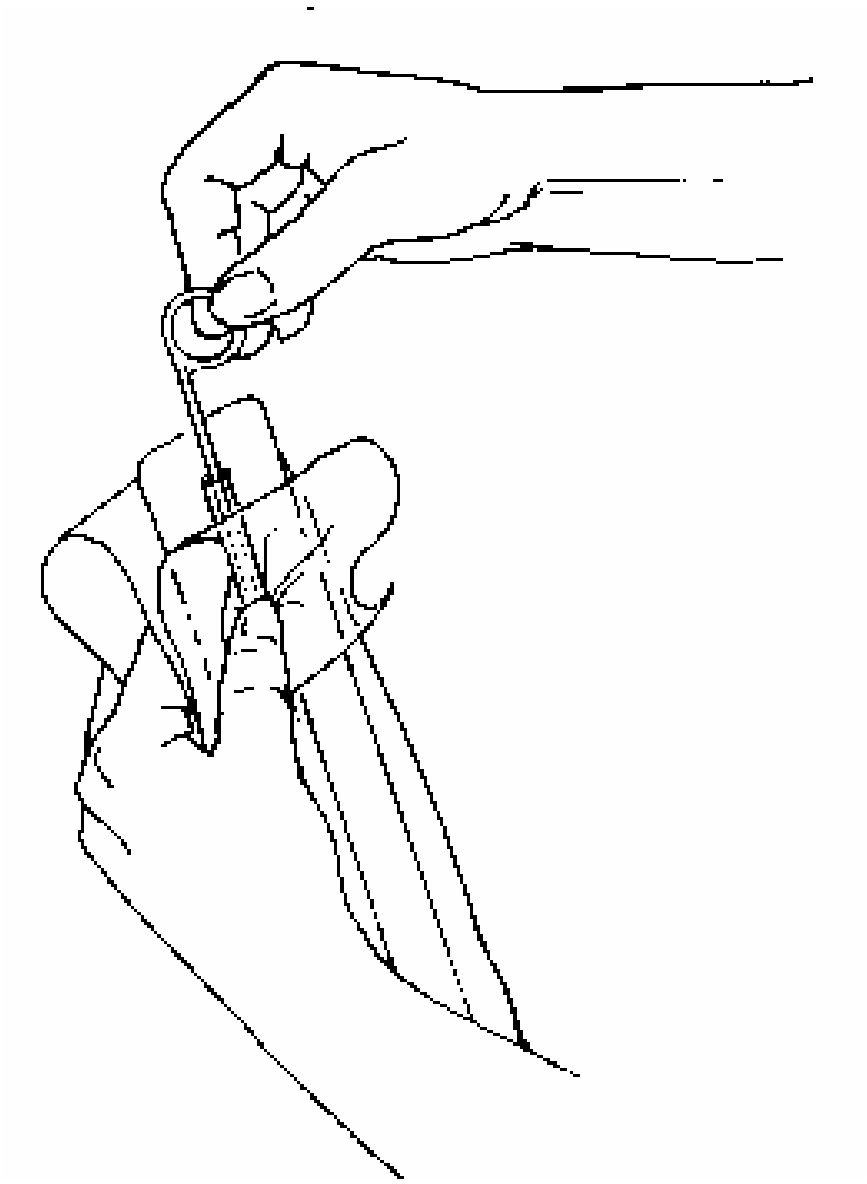
- Clients are also advised to return to the clinic if they have any questions or problems, or if they show any of the following warning signals:

P	Periods late with symptoms of pregnancy, like nausea and vomiting, which may indicate a possible method failure or pregnancy
A	Abdominal pain or pain during intercourse which may indicate a translocated IUD, a perforation, or infection
I	Infection, abnormal discharge
N	Not feeling well, fever, or chills which indicate an infection
S	String missing, shorter or longer, which may also indicate a lost or a translocated IUD

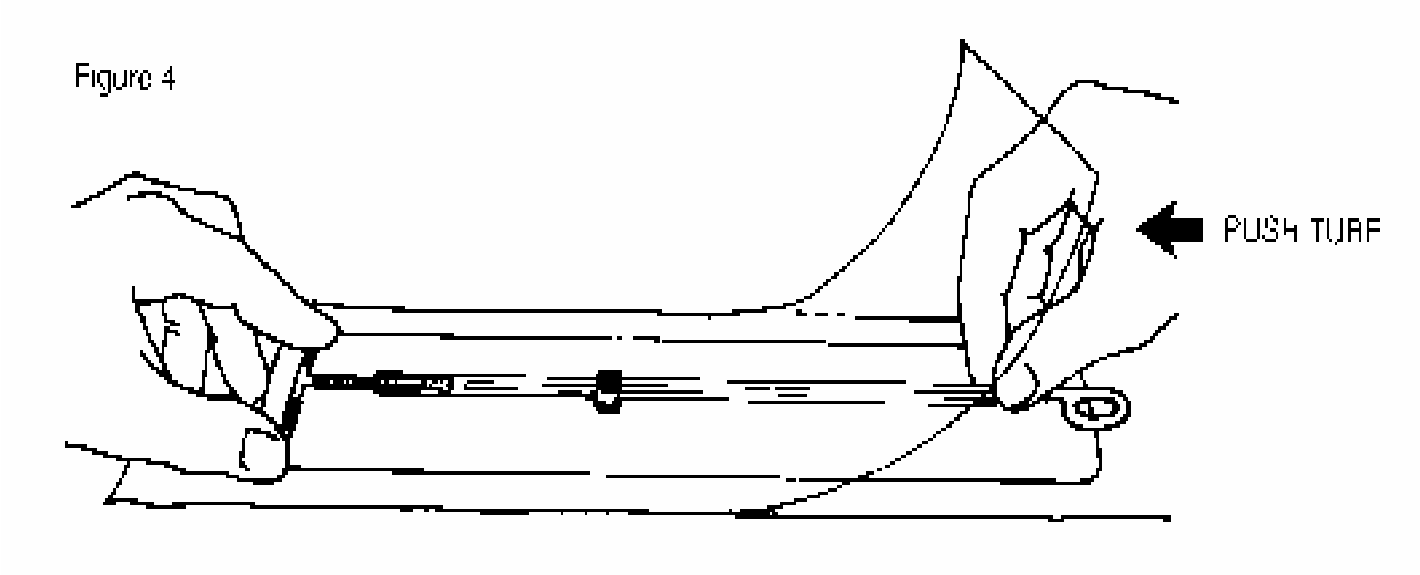
Annex 2 IUD Insertion

TRANSPARENCY – IUD INSERTION # 1

How to Load the Copper T 380A



TRANSPARENCY – IUD INSERTION # 2



TRANSPARENCY – IUD INSERTION # 3

Figure 5

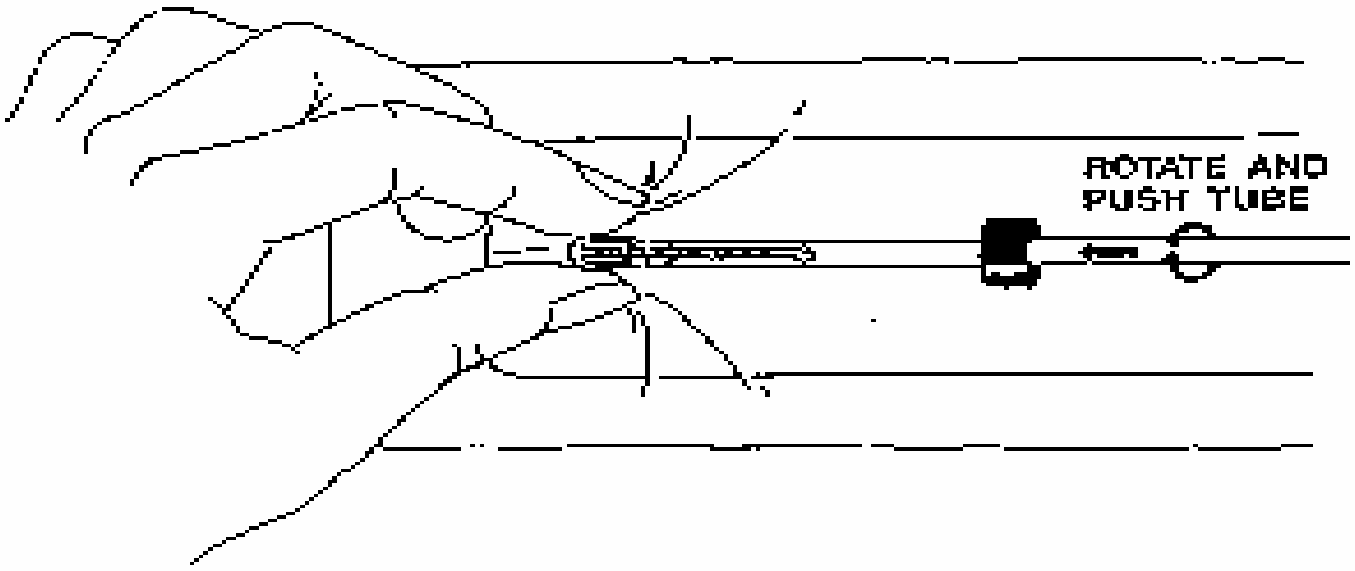
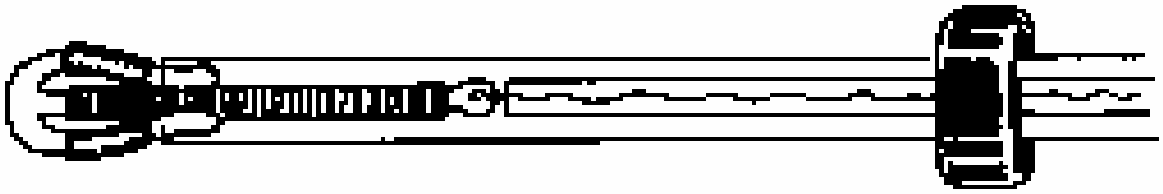


Figure 6



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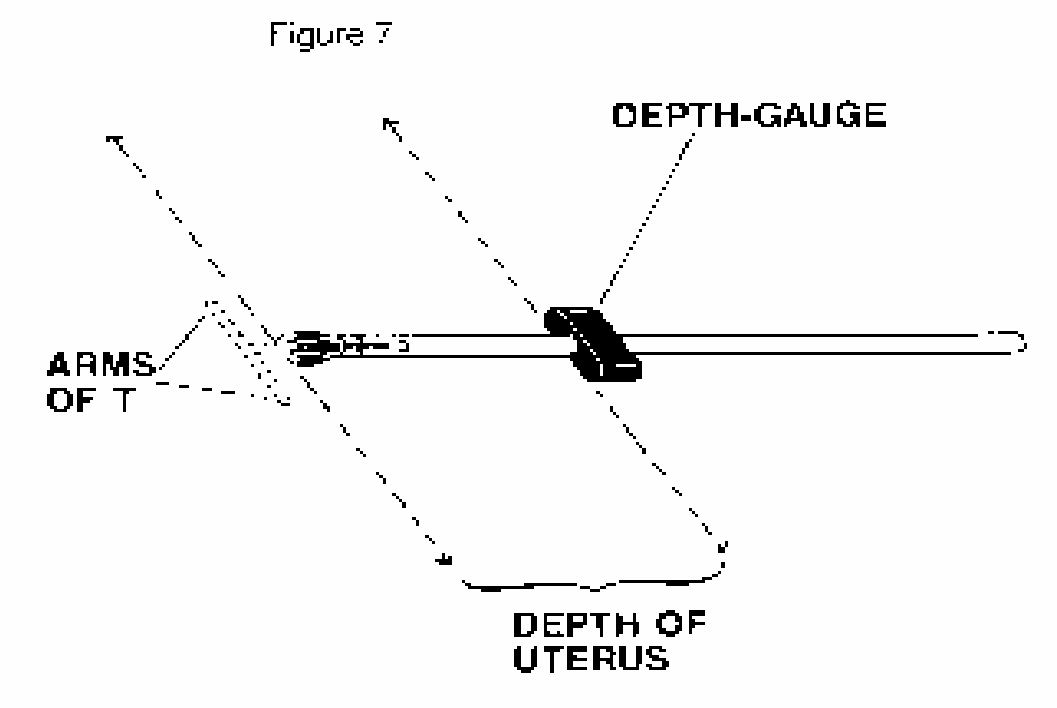

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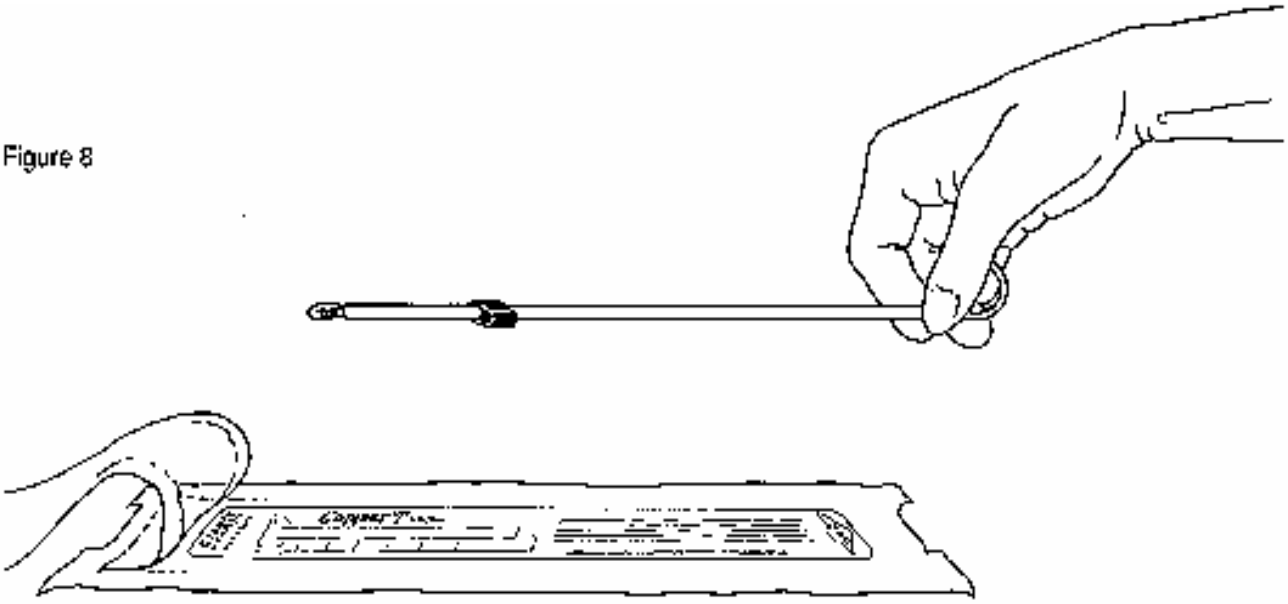

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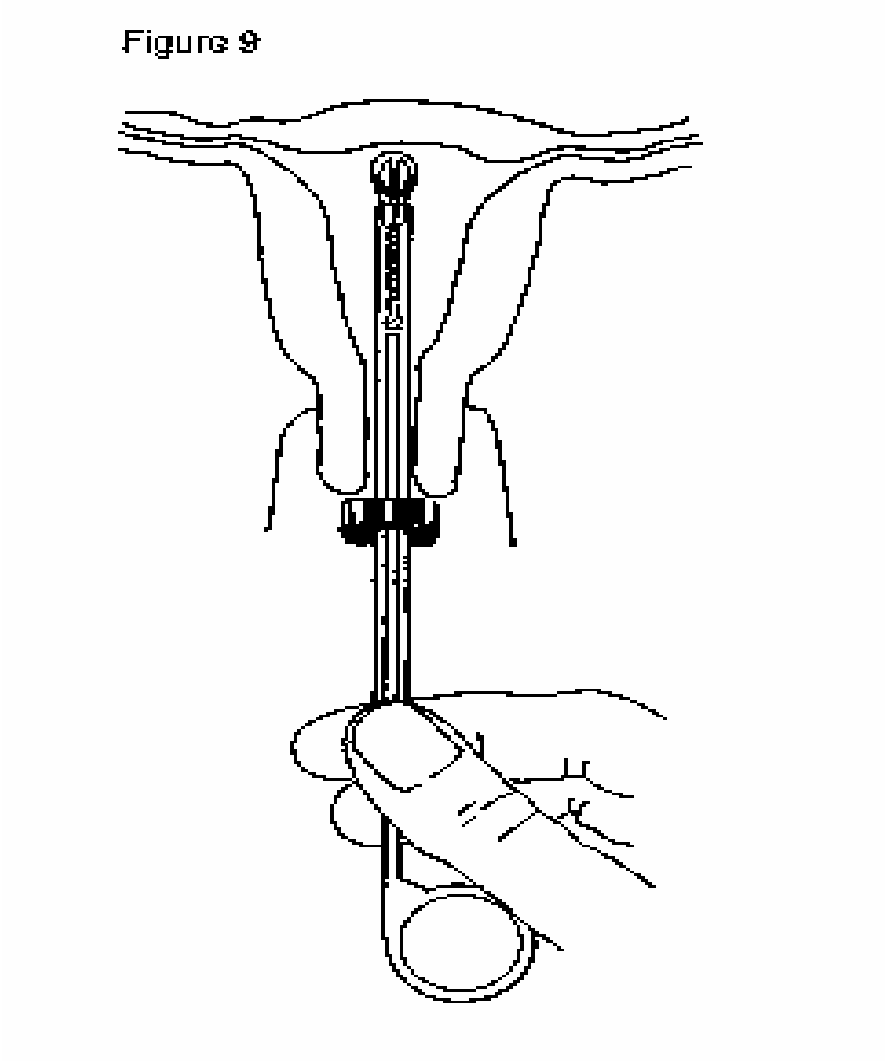

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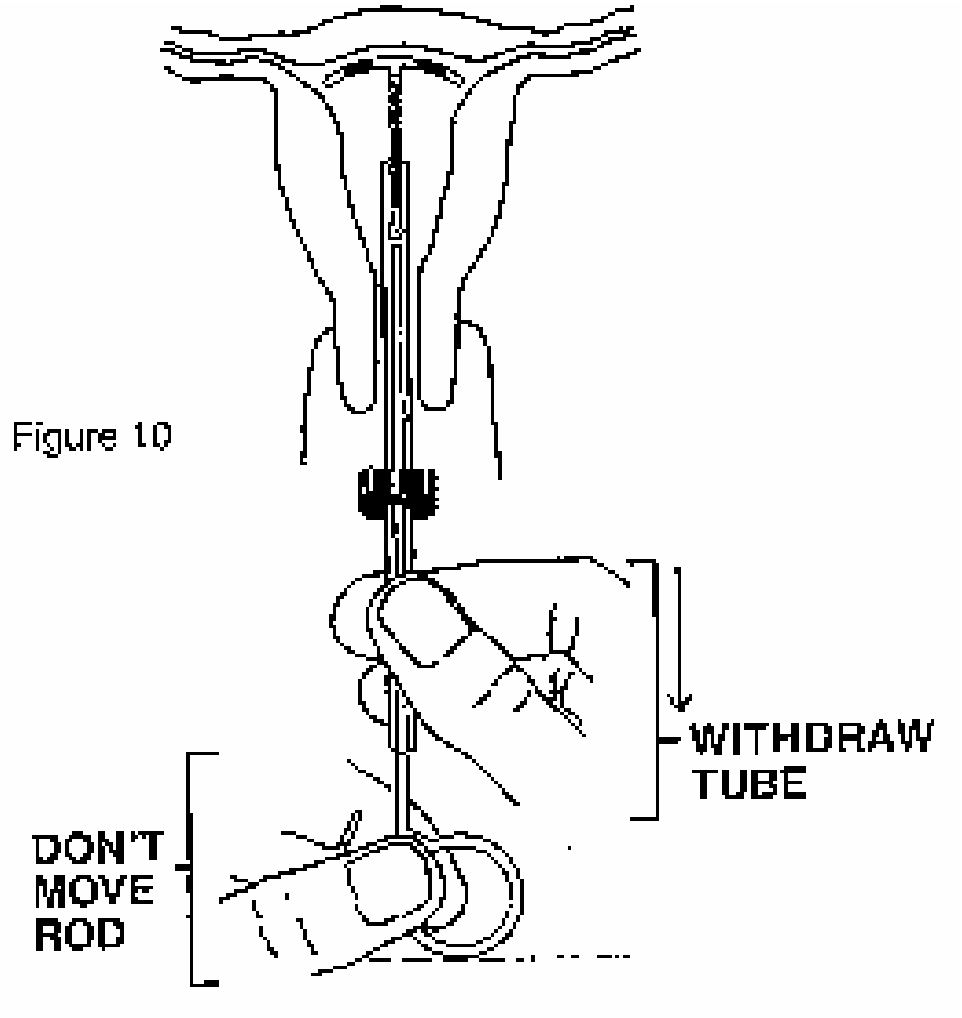

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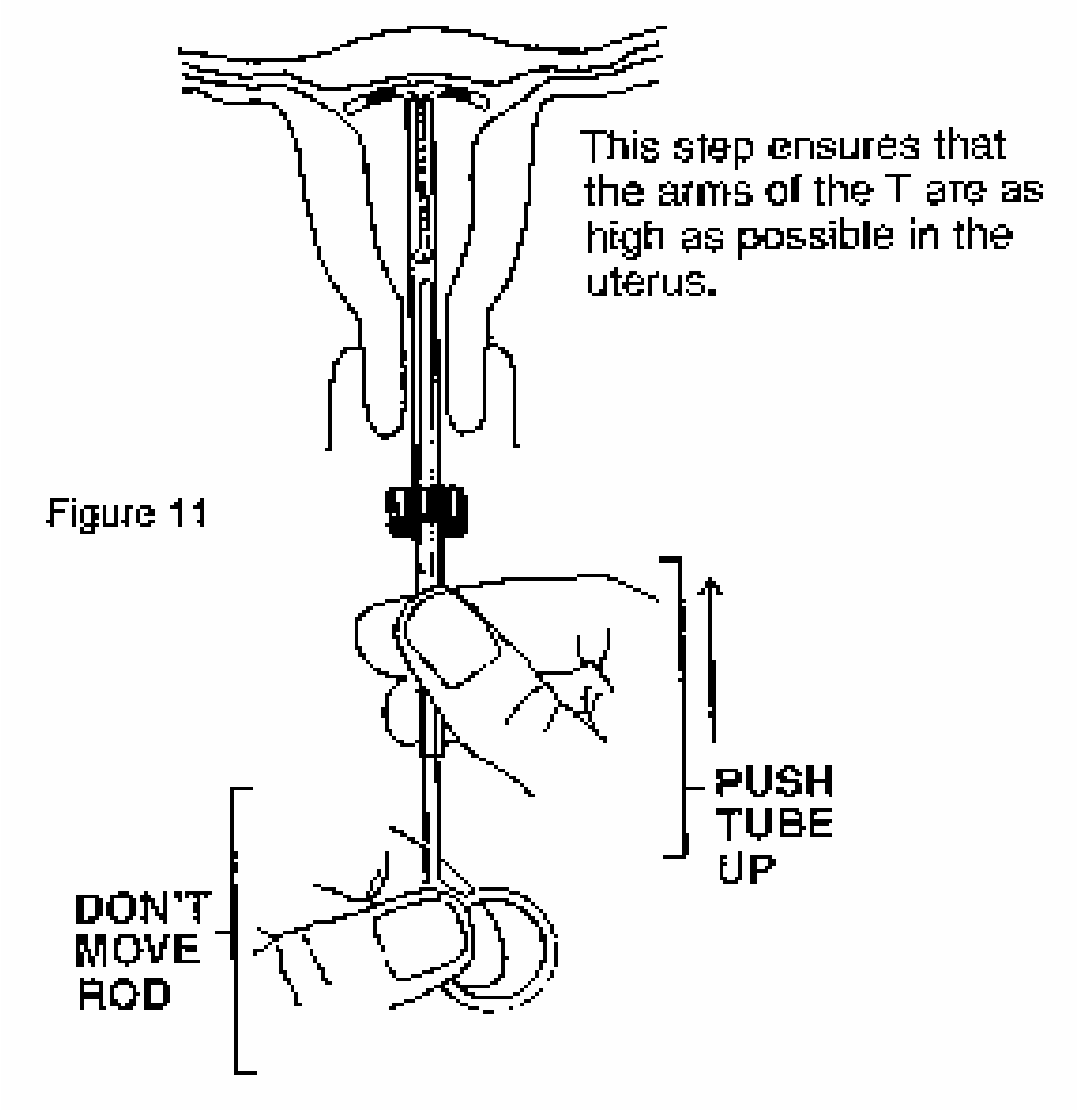

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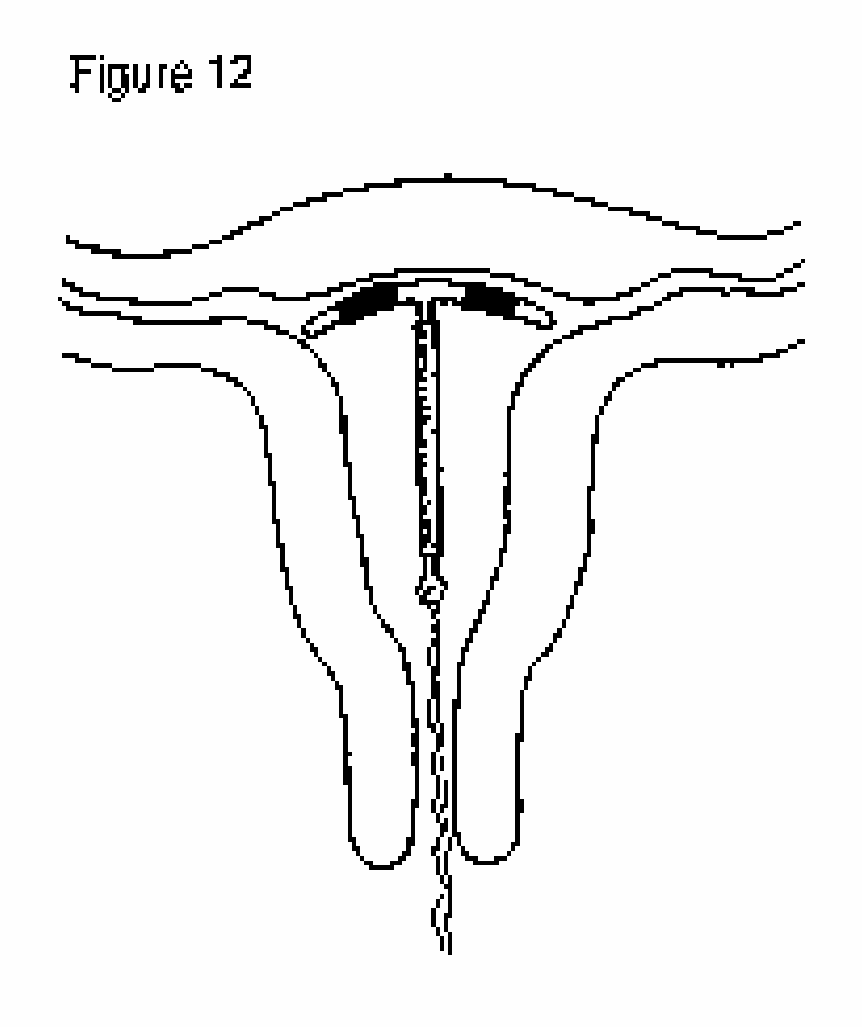
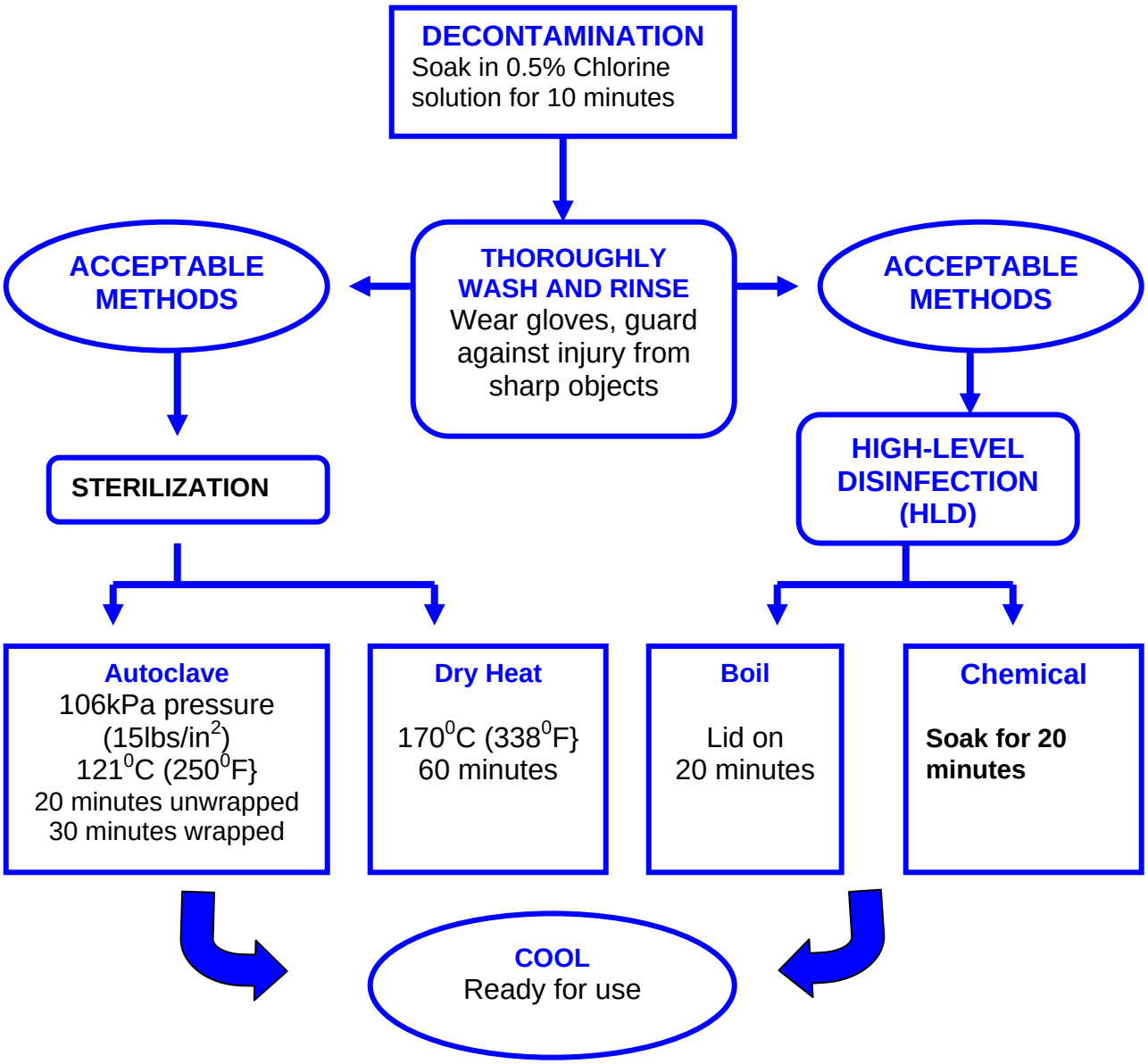


Annex 3

INFECTION PREVENTION & CONTROL

Decontamination, cleaning, and sterilization (or HLD) of surgical instruments, reusable gloves, and other items (processing of gloves, instruments, and other items)

The diagram below presents the steps to be followed in processing gloves, instruments, and other items to be used or used in surgical procedures, in general and in NSV, in particular**:**



* Wrapped sterile packs can be stored for up to one week. Unwrapped items should be stored in a sterile or HLD container with tight-fitting lid or used immediately.

Protective Barriers

Protective "barriers" (physical, mechanical, or chemical) placed between microorganisms and an individual, whether a client or a health worker, is an effective means of preventing the spread of diseases. These include:

1. *Hand-washing*

Hand washing may be the singlemost important procedure in preventing infection. For most activities, brief hand washing with plain or antimicrobial soap for about 15-30 seconds, followed by rinsing in a stream of water is sufficient. It is indicated:

- ☞ Before examining a client
- ☞ Before putting on HLD or sterile gloves for NSV procedure
- ☞ After an activity in which the hands may be contaminated. e.g.
  - Handling objects, including used (soiled) instruments
  - Touching mucous membranes, blood or other body fluids (secretions or excretions)

2. *Surgical hand scrub*

- ☞ A 3-5 minute hand scrub with a solution containing chlorhexidine (Hibitane. Savlon) or an iodophors (povidone iodine or Betadine) is recommended.
- ☞ An alternative to this is a non-irritating alcohol solution prepared by adding 2 ml of either glycerine, propylene glycol or Sorbitol to 100 ml of 60-90 % alcohol solution. Use 3-5 ml for each application and continue rubbing the solution over the hands for about 2 minutes, using a total of 6-10 ml per scrub.

3. *Wearing gloves,* either for surgery or when handling contaminated waste materials or used (soiled) instruments.

- ☞ Gloves should be worn by all staff before contact with blood and body fluids from any client.
- ☞ Single-use (disposable) gloves are preferable, but reusable gloves can be washed and then sterilized by autoclaving or subjected to HLD.

4. *Using antiseptic solutions for cleaning wounds or preparing the skin for surgery.* The recommended procedure and antiseptics are as follows:

- ☞ *For skin preparation*

  - Do not shave hair at the operative site. Shaving increases the risk of infection as the tiny nicks in the skin provide an ideal setting for microorganisms to multiply and grow.
  - Ask clients for any allergy to antiseptics (i.e. povidone iodine).

- If visibly soiled, thoroughly clean the clients' skin with soap and water before applying the antiseptic.

5. *High-level disinfection can be done by boiling, steaming, or soaking in a chemical disinfectant*

☞ Disinfection by boiling

- Items should be completely submerged or covered with water while boiling.
- Always boil the water for 20 minutes.
- Start timing when the water begins to boil.
- Do not add anything to the pot after boiling begins.
- Air dry in a high-level disinfected container before use or storage.

☞ Disinfection by steaming

- Always steam for 20 minutes in a steamer with a lid.
- Reduce heat so that water continues to boil in a rolling boil.
- Start timing when the steam begins to come out from between the pans and the lids.
- Do not use more than 3 steamer pans.
- Air dry in covered steamer pans or a high-level disinfected container before use or storage.

☞ Chemical disinfection using 2% glutaraldehyde (cidex)

- Following decontamination, thoroughly clean and dry all equipment and instruments.
- Cover all instruments completely with correct dilution of properly-stored disinfectant.
- Soak for 20 minutes.
- Rinse well with boiled water and air dry.
- Store for up to one week in a high-level disinfected, covered container, or use promptly.
- To prepare a high-level disinfected container, boil (if small) or fill it with 0.5% chlorine solution and soak for 20 minutes. Rinse the inside thoroughly with boiled water. Air dry before use.

6. Sterilization

☞ Dry heat – sterilize instruments in autoclave at 170^{o}C or 338^{0}F for one (1) hour.

☞ Steam Pressure Auto Clave at 106kPa pressure (15lbs/in^{2}) 121^{0}C (250^{0}F} for 20 minutes if unwrapped or 30 minutes for wrapped instruments.

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